INDEX TO VOLUME 39

An asterisk (*) denotes the abstract of a paper presented before the Academy or an affiliated society.

PROCEEDINGS OF THE ACADEMY AND AFFILIATED SOCIETIES

Anthropological Society of Washington. 177.
Geological Society of Washington. 105.
Philosophical Society of Washington. 420.
Washington Academy of Sciences. 47, 82, 102, 174, 206, 279, 343, 380, 419.

AUTHOR INDEX

ABLEITER, J. KENNETH. Alfred Paul Dachnowski-Stokes (obituary). 348.

ADAMS, LEASON H. Richard Chace Tolman (obituary). 280.

AMSDEN, THOMAS W. Two new genera of brachiopods from the Henryhouse formation (Silurian) of Oklahoma. 202.

ANDREWS, ALFRED C. The codfishes of the Greeks and Romans. 1.

BAKER, EDWARD W. Pomerantziidae, a new family of prostigmatic mites. 269.

BANGHAM, RALPH V. See VAN CLEAVE, H. J. 398.

BARKSDALE, WILLIAM L. See BLACK, R. F. 107.

BAYER, FREDERICK M. Chalcogorgiinae, a new subfamily of Chrysogorgiidae (Coelenterata: Alcyonaria), and a description of *Chalcogorgia pellucida*, new genus and new species, from the Straits of Florida. 237.

BECK, HORACE P. The animal that cannot lie down. 294.

BEHRE, C. H., Jr. *Structural control of the European lead-zinc deposits of the "Mississippi Valley" type. 110.

BEKKEDAHL, NORMAN. Raymond McGeary Hann (obituary). 426.

BETTS, C. A. Samuel Henry McCrory (obituary). 180.

BISHOPP, F. C. Edward Rhodes Stitt (obituary). 381.

BLACK, ROBERT F., and BARKSDALE, WILLIAM L. * Oriented lakes of northern Alaska, 107.

BLACKWELDER, RICHARD E. An adventure in biblio-chronology. 301.

BLAKE, DORIS H. Notes on some West Indian Chrysomelidae. 367.

BROWN, ROLAND W. Nelson Horatio Darton (obituary). 114.

———. Pliocene plants from Cache Valley, Utah. 224.

BROWN, WALTER C., and MYERS, GEORGE S. A new frog of the genus *Batrachylodes* from the Solomon Islands. 379.

CHAMBERLIN, RALPH V. On some western millipeds of the order Spirobolida. 163.

———. Some millipeds of the families Polydesmidae and Xystodesmidae. 94.

CLARK, AUSTIN H. Echinoderms from the mid-Atlantic dredged by the *Atlantis* in the summer of 1948. 371.

———. Some littoral sea-urchins from the Philippines. 271.

CREAMER, A. S. See HUNT, CHARLES B. 120.

CURTIS, HARVEY L. * An annual meeting [Philosophical Society] of forty years ago. 422.

———. Establishment of graduate study courses at the National Bureau of Standards. 351.

CURTIS, KARL P., and WILLEY, GORDON R. A Veraguas grave. 17.

DARROW, K. K. * Magnetic resonance. 420.

DEIGNAN, H. G. Races of *Pycnonotus cafer* (Linnaeus) and *P. aurigaster* (Vieillot) in the Indo-Chinese Subregion. 273.

DOBROVOLNY, ERNEST. * Geology applied to highway design and construction. 108.

DORN, HAROLD F. Morbidity from cancer. 117.

DORSEY, N. ERNEST. A fallacy regarding integers. 49.

DUNCAN, HELEN. Genotypes of some Paleozoic Bryozoa. 122.

DUNNING, J. R. * High-energy accelerator progress. 422.

EMBREE, JOHN. A visit to Laos, French Indochina. 149.

EWERS, JOHN C. The last bison drives of the Blackfoot Indians. 355.

EWING, H. E. The origin and classification of the trombiculid mites, or Trombiculidae. 229.

FAHEY, JOSEPH J. See HUNT, CHARLES B. 120.

FIRESTONE, FLOYD A. * Tricks with the supersonic reflectoscope. 421.

FISCHER, R. P. * Origin of the Colorado Plateau vanadium deposits. 109.

GAHAN, A. B. The status of the genus *Mymar* Curtis (Hymenoptera: Mymaridae). 204.

GAZIN, C. LEWIS. A leptictid insectivore from the middle Eocene Bridger formation of Wyoming. 220.

GIDDINGS, J. L., Jr. Early flint horizons on the north Bering Sea coast. 85.

GOLDMAN, MARCUS I. * Bauxitization—a tropical disease. 107.

GURNEY, ASHLEY B. Distributional and synonymic notes on psocids common to Europe and North America, with remarks on the distribution of Holarctic insects (Corrodentia). 56.

GUYTON, WILLIAM F. * Industrial use of ground water in the United States. 105.

HARRY, ROBERT R. A new species of goby and new records of fishes from the Solomon Islands. 140.

HERMANN, FREDERICK J. Studies in *Lonchocarpus* and related genera, V: New species from Middle America and the *Lonchocarpus guatemalensis* complex. 306.

HOFFMEISTER, DONALD F. A new name for the meadow mouse *Microtus roberti occidentalis* Turov. 205.

HUNT, CHARLES B.; CREAMER, A. S.; and FAHEY, JOSEPH J. A newly discovered type of clay deposit in Utah. 120.

HURLBUT, HERBERT S. See KNIGHT, K. L. 20.

JORDAN, GEORGE F. Joseph Alfred Ambler (obituary). 115.

KELSON, KEITH R. Two new wood rats from eastern Utah. 417.

KNIGHT, KENNETH L., and HURLBUT, HERBERT S. The mosquitoes of Ponape Island, eastern Carolines. 20.

KRONIG, R. * The impedance concept in physics and engineering. 420.

LANGEBARTEL, DAVE A. See SMITH, H. M. 409.

LEWIS, G. EDWARD. *El Sangay, and some other volcanoes of Ecuador. 105.

LITTLE, ELBERT L. Nomina conservanda proposals for families of seed plants. 323.

LOEBLICH, ALFRED R., JR., and TAPPAN, HELEN. New Kansas Lower Cretaceous Foraminifera. 90.

LOOMIS, H. F. New millipeds of the spiroboloid genus *Watichelus* from the Pacific coast. 241.

LOVERING, T. S. William Harvey Emmons (obituary). 215.

LYONS, HAROLD. * Frequency and time standards and the atomic clock. 422.

MARGENAU, HENRY. *Causality in classical and modern physics. 425.

MARTON, L. * Observations of electromagnetic fields. 422.

MCVAUGH, ROGERS. Seven new species of Lobelioideae (Campanulaceae). 157.

MILLER, CARL F. An analysis of several Deptford-like pottery types found at a village site north of Moore's Creek, Cape Fear River, North Carolina. 317.

MITTLEMAN, M. B. The validity of relative head width in defining the races of *Ambystoma macrodactylum*. 43.

MOFFIT, FRED H. Philip Sidney Smith (obituary). 315.

MORTON, C. V. William Ralph Maxon (obituary). 247.

MURNAGHAN, F. D. * The evolution of the number concept. 421.

MYERS, GEORGE S. See BROWN, WALTER C. 379.

PHELPS, WILLIAM H., JR. See WETMORE, A. 377.

RAMBERG, WALTER. Contributions of electricity to mechanics. 281.

RAND, FREDERICK V. Albert Fred Woods (obituary). 313.

RAY, LOUIS L. François Emile Matthes (obituary). 146.

REEDER, CHARLOTTE GOODDING. *Muhlenbergia minutissima* (Steud.) Swallen and its allies. 363.

ROSS, CLARENCE S. Charles Whitman Cross (obituary). 347.

ROSS, C. P. * The Belt problem. 111.

ROSS, HERBERT H. The caddisfly genus *Neothremma* Banks (Trichoptera: Limnephilidae). 92.

ROSSI, BRUNO. * Cosmic rays. 424.

ROSSINI, FREDERICK D. An excursion in chemical thermodynamics. 249.

SAUNDERS, HAROLD E. Dwight F. Windenburg (obituary). 247.

SAYRE, A. NELSON. Oscar Edward Meinzer (obituary). 147.

SEEGER, R. J. * On research in aerophysics. 425.

SCHULTZ, LEONARD P., and WOODS, LOREN P. Keys to the genera of echelid eels and the species of *Muraenichthys* of the Pacific, with two new species. 169.

SHELESNYAK, M. C. *Human ecology in Arctic regions. 420.

SHOEMAKER, CLARENCE R. The amphipod genus *Corophium* on the west coast of America. 66.

———. Three new species and one new variety of amphipods from the Bay of Fundy. 389.

SMELT, R. *Problems of hypersonic flow. 425.

SMITH, HOBART M. Miscellaneous notes on Mexican lizards. 34.

——— and LANGEBARTEL, DAVE A. Notes on a collection of reptiles and amphibians from the Isthmus of Tehuantepec, Oaxaca. 409.

SMITH, PHILIP S. Stephen Reid Capps (obituary). 179.

SNYDERMAN, GEORGE S. The case of Daniel P.: An example of Seneca healing. 217.

SOKOLOFF, V. P. *Engineering map units in Fairfax quadrangle, Virginia. 109.

STIMSON, H. F. *The international temperature scale. 423.

STOSE, GEORGE W. Bailey Willis (obituary). 346.

TAPPAN, HELEN. See LOEBLICH, A. R., JR. 90.

TELLER, E. * The origin of cosmic rays. 423.

TRENT, HORACE M. * Demonstration of the supersonic reflectoscope. 421.

TRESSLER, WILLIS L. Marine Ostracoda from Tortugas, Florida. 335.

VAN CLEAVE, HARLEY J., and BANGHAM, RALPH V. Four new species of the acanthocephalan family Neoechinorhynchidae from fresh-water fishes of North America, one representing a new genus. 398.

VENNING, FRANK D. Cortical tracheids in the African cherry oranges (*Citropsis* species, Rutaceae: Aurantioideae). 383.

VOKES, H. E. The hinge and marginal pectinations of *Nuculoidea opima* (Hall), type of *Nuculoidea* Williams and Breger. 361.

WETMORE, ALEXANDER. A note on *Corythus splendens* Brehm. 245.

———. Geographical variation in the American redstart (*Setophaga ruticilla*). 137.

——— and PHELPS, WILLIAM H., JR. A new race of bird of the genus *Spodiornis* from Venezuela. 377.

WHEELER, JOHN A. * Mesons, the elusive elementary particles. 424.

WHITE, THEODORE E. The endocrine glands and evolution, No. 2: The appearance of large amounts of cement on the teeth of horses. 329.

WILLEY, GORDON R. See CURTIS, KARL P. 17.

WOODS, LOREN P. See SCHULTZ, LEONARD P. 169.

WORMAN, EUGENE C., JR. The "Neolithic" problem in the prehistory of India. 181.

SUBJECT INDEX

Anthropology. The last bison drives of the Blackfoot Indians. JOHN C. EWERS. 355.

Archeology. An analysis of several Deptford-like pottery types found at a village site north of Moore's Creek, Cape Fear River, North Carolina. CARL F. MILLER. 317.

A Veraguas grave. KARL P. CURTIS and GORDON R. WILLEY. 17.

Early flint horizons on the north Bering Sea coast. J. L. GIDDINGS, Jr. 85.

The "Neolithic" problem in the prehistory of India. EUGENE C. WORMAN, Jr. 181.

Biology. An adventure in biblio-chronology. RICHARD E. BLACKWELDER. 301.

Botany. Cortical tracheids in the African cherry oranges (*Citropsis* species, Rutaceae: Aurantioideae). FRANK D. VENNING. 383.

Muhlenbergia minutissima (Steud.) Swallen and its allies. CHARLOTTE GOODDING REEDER. 363.

Nomina conservanda proposals for families of seed plants. ELBERT L. LITTLE, Jr. 323.

Seven new species of Lobelioideae (Campanulaceae). ROGERS MCVAUGH. 157.

Studies in *Lonchocarpus* and related genera, V: New species from Middle America and the *Lonchocarpus guatemalensis* complex. FREDERICK J. HERMANN. 306.

Ecology. * Human ecology in Arctic regions. M. C. SHELESNYAK. 420.

Entomology. Distributional and synonymic notes on psocids common to Europe and North America, with remarks on the distribution of Holarctic insects (Corrodentia). ASHLEY B. GURNEY. 56.

Notes on some West Indian Chrysomelidae. DORIS H. BLAKE. 367.

Pomerantziidae, a new family of prostigmatic mites. EDWARD W. BAKER. 269.

The caddisfly genus *Neothremma* Banks (Trichoptera: Limnephilidae). HERBERT H. ROSS.

The mosquitoes of Ponape Island, eastern Carolines. KENNETH L. KNIGHT and HERBERT S. HURLBUT. 20.

The origin and classification of the trombiculid mites, or Trombiculidae. H. E. EWING. 229.

The status of the genus *Mymar* Curtis (Hymenoptera: Mymaridae). A. B. GAHAN. 204.

Ethnology. A visit to Laos, French Indochina. JOHN EMBREE. 149.

The animal that cannot lie down. HORACE P. BECK. 294.

The case of Daniel P.: An example of Seneca healing. GEORGE S. SNYDERMAN. 217.

Geology. A newly discovered type of clay deposit in Utah. CHARLES B. HUNT, A. S. CREAMER, and JOSEPH J. FAHEY. 120.

* Bauxitization—a tropical disease. MARCUS I. GOLDMAN. 107.

* El Sangay, and some other volcanoes of Ecuador. G. EDWARD LEWIS. 105.

* Engineering map units in Fairfax quadrangle, Virginia. V. P. SOKOLOFF. 109.

* Geology applied to highway design and construction. ERNEST DOBROVOLNY. 108.

* Industrial use of ground water in the United States. WILLIAM F. GUYTON. 105.

* Oriented lakes of northern Alaska. ROBERT F. BLACK and WILLIAM L. BARKSDALE. 107.

* Origin of the Colorado Plateau vanadium deposits. R. P. FISCHER. 109.

* Structural control of the European lead-zinc deposits of the "Mississippi Valley" type. C. H. BEHRE, Jr. 110.

*The Belt problem. C. P. ROSS. 111.

Herpetology. A new frog of the genus *Batrachylodes* from the Solomon Islands. WALTER C. BROWN and GEORGE S. MYERS. 379.

Miscellaneous notes on Mexican lizards. HOBART M. SMITH. 34.

Notes on a collection of reptiles and amphibians from the Isthmus of Tehuantepec, Oaxaca. HOBART M. SMITH and DAVE A. LAGEBARTEL. 409.

The validity of relative head width in defining the races of *Ambystoma macrodactylum.* M. B. MITTLEMAN. 43.

History of science. * An annual meeting [Philosophical Society] of forty years ago. HARVEY CURTIS. 422.

Ichthyology. A new species of goby and new records of fishes from the Solomon Islands. ROBERT R. HARRY. 140.

Keys to the genera of echelid eels and the species of *Muraenichthys* of the Pacific, with two new species. LEONARD P. SCHULTZ and LOREN P. WOODS. 169.

Mammology. A new name for the meadow mouse *Microtus roberti occidentalis* Turov. DONALD F. HOFFMEISTER. 205.

Two new wood rats from eastern Utah. KEITH R. KELSON. 417.

Mathematics. A fallacy regarding integers. N. ERNEST DORSEY. 49.

* The evolution of the number concept. F. D. MURNAGHAN. 421.

Medicine. Morbidity from cancer. HAROLD F. DORN. 117.

Natural history. The codfishes of the Greeks and Romans. ALFRED C. ANDREWS. 1.

Obituaries.

JOSEPH ALFRED AMBLER, 115.

ERNEST CLAYTON ANDREWS. 214.

STEPHEN REID CAPPS. 179.

CHARLES WHITMAN CROSS. 347.

NELSON HORATIO DARTON. 114.

WILLIAM HENRY EMMONS. 215.

ALFRED PAUL DACHNOWSKI-STOKES. 348.

RAYMOND MCGEARY HANN. 426.

HORACE TERHUNE HERRICK. 114.

FRANÇOIS EMILE MATTHES. 146.

Obituaries—Cont.
WILLIAM RALPH MAXON. 247.
SAMUEL HENRY MCCRORY. 180.
OSCAR EDWARD MEINZER. 147.
PHILIP SIDNEY SMITH. 315.
EDWARD RHODES STITT. 381.
RICHARD CHACE TOLMAN. 280.
BAILEY WILLIS. 346.
DWIGHT F. WINDENBURG. 247.
ALFRED FRED WOODS. 313.
Ornithology. A new race of bird of the genus *Spodiornis* from Venezuela. ALEXANDER WETMORE and WILLIAM H. PHELPS, Jr. 377.
A note on *Corythus splendens* Brehm. ALEXANDER WETMORE. 245.
Geographical variation in the American redstart (*Setophaga ruticilla*). ALEXANDER WETMORE. 137.
Races of *Pycnonotus cafer* (Linnaeus) and *P. aurigaster* (Vieillot) in the Indo-Chinese Subregion. H. G. DEIGNAN. 273.
Paleobotany. Pliocene plants from Cache Valley, Utah. ROLAND W. BROWN. 224.
Paleontology. A leptictid insectivore from the middle Eocene Bridger formation of Wyoming. C. LEWIS GAZIN. 220.
Genotypes of some Paleozoic Bryozoa. HELEN DUNCAN. 122.
New Kansas Lower Cretaceous Foraminifera. ALFRED R. LOEBLICH, Jr., and HELEN TAPPAN. 90.
The hinge and marginal pectinations of *Nuculoidea opima* (Hall), type of *Nuculoidea* Williams and Breger. H. E. VOKES. 361.
Two new genera of brachiopods from the Henryhouse formation (Silurian) of Oklahoma. THOMAS W. AMSDEN. 202.
Physical chemistry. An excursion in chemical thermodynamics. FREDERICK D. ROSSINI. 249.
Physics. * Causality in classical and modern physics. HENRY MARGENAU. 425.
Contributions of electricity to mechanics. WALTER RAMBERG. 281.
* Cosmic rays. BRUNO ROSSI. 424.
* Demonstration of the supersonic reflectoscope. HORACE M. TRENT. 421.
* Frequency and time standards and the atomic clock. HAROLD LYONS. 422.
* High-energy accelerator progress. J. R. DUNNING. 422.
* Magnetic resonance. K. K. DARROW. 420.
* Mesons, the elusive elementary particles. JOHN A. WHEELER. 424.
* Observations of electromagnetic fields. L. MARTON. 422.
* On research in aerophysics. R. J. SEEGER. 425.
* Problems of hypersonic flow. R. SMELT. 425.
* The impedance concept in physics and engineering. R. KRONIG. 420.
* The international temperature scale. H. F. STIMSON. 423.
* The origin of cosmic rays. E. TELLER. 423.
* Tricks with the supersonic reflectoscope. FLOYD A. FIRESTONE. 421.
Physiology. The endocrine glands and evolution, No. 2: The appearance of large amounts of cement on the teeth of horses. THEODORE E. WHITE. 329.
Science education.. Establishment of graduate study courses at the National Bureau of Standards. HARVEY L. CURTIS. 351.
Zoology. Chalcogorgiinae, a new subfamily of Chrysogorgiidae (Coelenterata: Alcyonaria), and a description of *Chalcogorgia pellucida*, new genus and new species, from the Straits of Florida. FREDERICK M. BAYER. 237.
Echinoderms from the mid-Atlantic dredged by the *Atlantis* in the summer of 1948. AUSTIN H. CLARK. 371.
Four new species of the acanthocephalan family Neoechinorhynchidae from freshwater fishes of North America, one representing a new genus. HARLEY J. VAN CLEAVE and RALPH V. BANGHAM. 398.
Marine Ostracoda from Tortugas, Florida. WILLIS L. TRESSLER. 335.
New millipeds of the spiroboloid genus *Watichelus* from the Pacific coast. H. F. LOOMIS. 241.
On some western millipeds of the order Spirobolida. RALPH V. CHAMBERLIN. 163.
Some littoral sea-urchins from the Philippines. AUSTIN H. CLARK. 271.
Some millipeds of the families Polydesmidae and Xystodesmidae. RALPH V. CHAMBERLIN. 94.
The amphipod genus *Corophium* on the west coast of America. CLARENCE R. SHOEMAKER. 66.
Three new species and one new variety of amphipods from the Bay of Fundy. CLARENCE R. SHOEMAKER. 389.